

AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims.

1. (Currently Amended) A ~~wireless e-mail~~ system, comprising:
~~a wireless mobile device comprising an e-mail client;~~
~~an e-mail~~ a server; and
a gateway; , wherein a wireless network ~~interconnecting~~ interconnects ~~said a wireless mobile~~
device and said gateway, the device comprising a communication client; ~~and~~ , wherein a
broadband network ~~interconnecting~~ interconnects said gateway and said ~~e-mail~~ server;
wherein when said client transmits a single self-contained request to said gateway via said
wireless network to retrieve a set of e-mail related information from said ~~e-mail~~ server,
said gateway retrieves at least said e-mail related information from said ~~e-mail~~ server via
said broadband network using a plurality of transactions taking place between the
gateway and the server, compiles said retrieved information into a single self contained
response and transmits said single response via said wireless network to said ~~e-mail~~
communication client.
2. (Currently Amended) The ~~wireless e-mail~~ system as in claim 1, wherein said self-
contained request and said single response form a stateless request-response pair.
3. (Currently Amended) The ~~wireless e-mail~~ system as in claim 1, wherein said ~~e-mail~~
server is an Internet message access protocol (IMAP) server and said gateway further comprises
an IMAP client application for communicating with said IMAP server.

4. (Currently Amended) The ~~wireless e-mail~~ system as in claim 1, wherein said ~~e-mail~~ server is a post office protocol version 3 (POP3) server and said gateway further comprises ~~an~~ a POP3 client application for communicating with said POP3 server.

5. (Currently Amended) The ~~wireless e-mail~~ system as in claim 1, wherein said ~~e-mail~~ server is ~~an~~ a simple mail transfer protocol (SMTP) compatible server and said gateway further comprises an SMTP client application for communicating with said SMTP compatible server.

6. (Currently Amended) The ~~wireless e-mail~~ system as in claim 1, wherein said gateway further comprises an application for monitoring e-mail traffic.

7. (Currently Amended) The ~~wireless e-mail~~ system as in claim 1, further comprising a mobile operator network, wherein said gateway is an extension of said mobile operator network.

8. (Currently Amended) The ~~wireless e-mail~~ system as in claim 1, wherein said single self-contained request and said single self contained response are transmitted using hypertext transfer protocol (HTTP).

9. (Currently Amended) The ~~wireless e-mail~~ system as in claim 1, wherein said single self-contained request and said single self contained response are implemented using an extensible markup language (XML) structure.

10. (Currently Amended) ~~A gateway interconnecting a wireless mobile device and an e-mail server, the wireless mobile device comprising an e-mail client and adapted for data~~

~~communication with a wireless network, the e-mail server adapted for data communication with a broadband network, the gateway comprising: a first stateless interface interconnected with the wireless network; a second interface interconnected with the broadband network; and a channel management function;~~ An apparatus comprising:

at least one processor; and

at least one memory including computer program code for one or more programs, the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform at least the following,

~~wherein when the e-mail client transmits~~ receive from a client application of a device, via a wireless network, a single self-contained request to said at a first interface, wherein said first interface is interconnected with said wireless network, via said wireless network to retrieve a set of e-mail related information from the e-mail server, said channel management function

~~retrieves~~ retrieve ~~at least said e-mail related information from the~~ an e-mail server via said a second interface and the a broadband network using a plurality of transactions taking place between the apparatus and the server, wherein said second interface is interconnected with said broadband network,

~~compiles~~ determine to compile ~~said retrieved information into a single self contained response, and~~

~~transmits~~ determine to transmit ~~said single response via said first interface and the mobile network to the e-mail~~ communication ~~client.~~

11. (Currently Amended) The gateway apparatus as in claim 10, wherein the ~~e-mail~~ server is an Internet message access protocol (IMAP) server, and said second interface is an IMAP interface.

12. (Currently Amended) The gateway apparatus as in claim 10, wherein the ~~e-mail~~ server is a post office protocol version 3 (POP3) server, and said second interface is a POP3 interface.

13. (Currently Amended) The gateway apparatus as in claim 10, further comprising an e-mail traffic monitoring application.

14. (Currently Amended) The gateway apparatus as in claim 10, wherein said single self-contained request and response are transmitted using hypertext transfer protocol (HTTP) and said first interface is an HTTP interface.

15. (Currently Amended) A method comprising:

~~in a client e-mail application on a wireless mobile device, forming a single request for the e-mail related information;~~

~~transmitting said~~ receiving, via a wireless network, a single request for e-mail related information, wherein the single request is formed in a client application at a device; to a gateway via the wireless network, said gateway

retrieving at least the e-mail related information from ~~the~~ a server via ~~the~~ a broadband network using a plurality of transactions taking place with the server; ~~wherein said gateway~~

determining to compile ~~compiles~~ said retrieved information into a single response; and

~~transmitting~~ determining to transmit said single response to said client application via said wireless network; ~~and in said client application, retrieving the e-mail related information from said response.~~

16. (Currently Amended) The method of claim 15, wherein the e-mail related information is located in a mailbox on the server, wherein said request comprises a mailbox identifier (ID) and further wherein said retrieving comprises ~~logging~~ determining to log onto the server using the mailbox ID and ~~downloading~~ determining to download the requested e-mail related information.

17. (Currently Amended) The method of claim 15, wherein the e-mail related information is located in a mailbox on the server, wherein said ~~gateway~~ apparatus periodically determines if new e-mail is available in said mailbox and further wherein if at least one new e-mail message is available in said mailbox, said ~~gateway~~ apparatus transmits a new e-mail message notification to said client application via said wireless network.

18. (Currently Amended) The method of claim 15, wherein the ~~e-mail~~ server is an Internet message access protocol (IMAP) server, said mailbox has a mailbox name and a periodic determining technique comprises transmitting a SELECT command including said mailbox name to the server.

19. (Currently Amended) The method of claim 15, wherein the ~~e-mail~~ server is a post office protocol version 3 (POP3) server, said mailbox has a mailbox name and a periodic

determining technique comprises transmitting a unique identification listing (UIDL) command including said mailbox name to the server.

20. (Previously Presented) The method of claim 17, wherein said new e-mail message notification transmitting comprises appending said new e-mail message notification to a subsequent single response.

21. (Currently Amended) The method of claim 17, wherein said ~~wireless mobile~~ device is ~~an~~ a short message service (SMS) compatible device and said new e-mail message notification transmitting comprises transmitting said new e-mail message notification to said client e-mail application using SMS.

22. (Currently Amended) The method of claim 17, wherein said ~~wireless mobile~~ device is a wireless application protocol (WAP) compatible device and said new e-mail message notification transmitting comprises transmitting said new e-mail message notification to said client e-mail application using WAP.

23. (Currently Amended) The method of claim 17, wherein for each said new e-mail message said ~~gateway~~ apparatus retrieves at least a message sender and a message subject and appends said message sender and a message subject to a new e-mail list and wherein said new e-mail message notification comprises said new e-mail list.

24. (Currently Amended) The method of claim 17, wherein said ~~gateway apparatus~~ determines a quantity of new e-mail messages available in said mailbox and said new e-mail message notification comprises said quantity.

25. (Currently Amended) A method comprising:

~~providing an e-mail gateway comprising a first stateless interface interconnected with the wireless network and a second interface interconnected with the broadband network;—~~
~~in a client e-mail application on a wireless mobile device, transferring~~ receiving from a client application in a device, via a wireless network, a single request at a first stateless interface for the e-mail related information, wherein said first stateless interface is interconnected with said wireless network to said first interface via the wireless network;
~~in said gateway: receiving said request at said first interface;—~~
retrieving at least the requested e-mail related information from ~~the~~ a server via the a second interface and a broadband network using a plurality of transactions taking place with the server, wherein said second interface is interconnected with said broadband network;
~~compiling~~ determining to compile said retrieved information into a single response; and
~~transmitting~~ determining to transmit said single response to said client application via said first interface and said wireless network; and ~~in said client application, retrieving the e-mail related information from said response.~~

26. (Currently Amended) The method of claim 25, wherein the e-mail related information is located in a mailbox on the server, wherein said request comprises a mailbox identifier (ID) and further wherein said retrieving comprises ~~logging~~ determining to log onto the server using

the mailbox ID and ~~downloading~~ determining to download the requested e-mail related information.

27. (Currently Amended) The method of claim 25, wherein the e-mail related information is located in a mailbox on the server, and wherein said gateway the method further comprises:

periodically ~~determines~~ determining if new e-mail is available in said mailbox; and ~~further~~
~~wherein~~

if at least one new e-mail message is available in said mailbox, ~~said gateway transmits~~
transmitting a new e-mail message notification to said client application via said wireless network.

28. (Currently Amended) The method of claim 25, wherein the ~~e-mail~~ server is an Internet message access protocol (IMAP) server, said mailbox has a mailbox name and a periodic determining technique comprises transmitting a SELECT command including said mailbox name to the server.

29. (Currently Amended) The method of claim 25, wherein the ~~e-mail~~ server is a post office protocol version 3 (POP3) server, said mailbox has a mailbox name and a periodic determining technique comprises transmitting a unique identification listing (UIDL) command including said mailbox name to the server.

30. (Previously Presented) The method of claim 27, wherein said new e-mail message notification transmitting comprises appending said new e-mail message notification to a subsequent single response.

31. (Currently Amended) The method of claim 27, wherein said ~~wireless mobile~~ device is ~~an~~ a short message service (SMS) compatible device and said new e-mail message notification transmitting comprises transmitting said new e-mail message notification to said client e-mail application via SMS.

32. (Currently Amended) The method of claim 27, wherein said ~~wireless mobile~~ device is a wireless application protocol (WAP) compatible device and said new e-mail message notification transmitting comprises transmitting said new e-mail message notification to said client e-mail application using WAP.

33. (Currently Amended) The method of claim 27, wherein the method further comprises: for each said new e-mail message, retrieving said ~~gateway~~ retrieves at least a message sender and a message subject and determining to append ~~appends~~ said message sender and a message subject to a new e-mail list, ~~and~~ wherein said new e-mail message notification comprises said new e-mail list.

34. (Currently Amended) The method of claim 27, wherein the method further comprises: said ~~gateway~~ ~~determines~~ determining a quantity of new e-mail messages available in said mailbox, ~~and~~ wherein said new e-mail message notification comprises said quantity.

35-37. (Canceled)